



MOJZA

5070 & 0620

O Levels & IGCSE

CHEMISTRY

COLORS IN CHEMISTRY



UPDATED TO THE
2025-27 SYLLABUS

1st
Edition

Colours in Chemistry

O Level/IGCSE Chemistry

Compounds

Oxides/Hydroxide

Compound	Formula	Colour
Aluminium Oxide/Hydroxide	$\text{Al}_2\text{O}_3 / \text{Al}(\text{OH})_3$	White
Potassium Oxide/Hydroxide	$\text{K}_2\text{O} / \text{KOH}$	White
Calcium Oxide/Hydroxide	$\text{Ca}_2\text{O} / \text{COH}$	White
Magnesium Oxide/Hydroxide	$\text{MgO} / \text{Mg}(\text{OH})_2$	White
Sodium Oxide/Hydroxide	$\text{Na}_2\text{O} / \text{NaOH}$	White
Iron (II) Oxide	FeO	Black
Iron (II) Hydroxide	$\text{Fe}(\text{OH})_2$	Pale Green
Iron (III) Oxide	Fe_2O_3	Red Brown
Iron (III) Hydroxide	$\text{Fe}(\text{OH})_3$	Reddish Brown
Copper (I) Oxide	Cu_2O	Brownish Red
Copper (II) Oxide	CuO	Black
Chromium Oxide	Cr_2O_3	Chrome Green
Chromium Hydroxide	$\text{Cr}(\text{OH})_3$	Green
Lead Oxide	PbO	Yellow

Sulfates

Compound	Formula	Colour
Hydrated Iron (II) Sulfate	$\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$	Blue Green
Anhydrous Iron (II) Sulfate	FeSO_4	White
Hydrated Iron (III) Sulfate	$\text{Fe}_2(\text{SO}_4)_3 \cdot x\text{H}_2\text{O}$	Grayish White

Anhydrous Iron (III) Sulfate	$\text{Fe}_2(\text{SO}_4)_3$	White
Hydrated Copper (II) Sulfate	$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$	Blue
Anhydrous Copper (II) Sulfate	CuSO_4	White
Barium Sulfate	BaSO_4	White
Lead Sulfate	PbSO_4	White
Calcium Sulfate	CaSO_4	White

Chlorides

Compound	Formula	Colour
Iron (II) Chloride	FeCl_2	White
Iron (III) Chloride	FeCl_3	Orange Brown
Copper (I) Chloride	CuCl	White to Cream
Hydrated Copper (II) Chloride	$\text{CuCl}_2 \cdot 2\text{H}_2\text{O}$	Green
Anhydrous Copper (II) Chloride	CuCl_2	Yellowish Brown
Hydrated Cobalt Chloride	$\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$	Pink Purple
Anhydrous Cobalt Chloride	CoCl_2	Blue
Silver Chloride	AgCl	White

Nitrates and Carbonates

Compound	Formula	Colour
Copper (II) Nitrate	$\text{Cu}(\text{NO}_3)_2$	Blue
Copper (II) Carbonate	CuCO_3	Green
Silver Nitrate	AgNO_3	Colourless or White
Silver Carbonate	Ag_2CO_3	Pale Yellow

Miscellaneous

Compound	Formula	Colour
Potassium Dichromate	$K_2Cr_2O_7$	Orange
Silver Bromide	AgBr	Pale Yellow
Silver Iodide	AgI	Yellow
Iron (II) Bromide	$FeBr_2$	Yellow to Brown
Iron (III) Bromide	$FeBr_3$	Red Brown
Iron (II) Iodide	FeI_2	Reddish Violet to Brown
Iron (III) Iodide	FeI_3	Brown

Gases

Gas	Formula	Colour
Fluorine	F_2	Yellowish Green
Chlorine	Cl_2	Pale green
Bromine	Br_2	Brown Fumes
Iodine	I_2	Purple Vapours/ Violet Fumes
Oxygen	O_2	Colourless
Carbon dioxide	CO_2	Colourless
Ammonia	NH_3	Colourless
Sulfur dioxide	SO_2	Colourless
Nitrogen dioxide	NO_2	Brown Fumes

Indicators

Indicator	Acidic Colour	Basic Colour
Phenolphthalein	Colourless	Pink
Methyl Orange	Red	Yellow
Litmus	Red	Blue
Thymolphatenen	Colourless	Deep Blue

Metals

Metal	Colour
Alkali Metals - Group I	Silver
Alkaline Earth Metals - Group II	Gray
Iron	Gray
Copper	Pink/Reddish Brown
Aluminium	Silvery White/Dull Gray



A Note from Mojza

This resource for Chemistry(5070) has been prepared by Team Mojza, covering the content for GCE O Levels and IGCSE 2025-27. The content of this resource has been prepared with utmost care. We apologise for any issues overlooked; factual, grammatical or otherwise. We hope that you benefit from these and find them useful towards achieving your goals for your Cambridge examinations.

If you find any issues within these notes or have any feedback, please contact us at support@mojza.org.

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These notes are made to encompass the complete syllabus for 5070 & 0620 from 2025 to 2027, with great attention and care for every topic. All information is curated in a simple, clear, and concise manner. The aim is to aid students and make learning easier in preparation for their exams. Team Mojza makes every effort to error-check all the content; if you find any discrepancies, please reach out to us at support@mojza.org.